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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,060	04/28/2000	Yoshikuni Watanabe	500.38506X00	3167

20457 7590 11/06/2003

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/559,060 ✓

Applicant(s)

WATANABE ET AL.

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to application No. 09/559,060 filed 04/28/00, claims 1-13 remain pending and are hereby set forth for examination.

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) based on a Japanese Application No. 11-123508 filed April 30, 1999. The certified copy has been received and placed in file.

3. Specific reference to an earlier filed application has been noted, reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number. The current status of all nonprovisional parent applications referenced should be included, e.g. Application No. 09/443,102 filed November 18, 1999, now patent No. 6,578,159 issued on 06/10/03. Further, reference to another U.S. Patent Application filed based on a Japanese Application No. 11-070623 has been noted, NO application number is indicated. Correction is required (see MPEP §202.01).

4. Claims 1, 5 and 11 are objected to be of the following informalities, in this case, claim 1 and 11 both recite the clause "said plurality of system" in the 2nd line and 3rd line respectively, and further, claim 5 recites the clause "said hub" on the 4th line of the claim. There is insufficient antecedent basis for these limitations in these claims (see MPEP §2173.05(e)). Correction is required.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed

before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claim 1-13 rejected under 35 U.S.C. 102(e) as being anticipated by TAYLOR et. al. U.S. Patent No. 6,256,676 (referred to as Taylor hereafter).

Regarding claim 1, Taylor teaches substantial features of the invention as claimed, teaching a system comprising:

- a plurality of information systems (Taylor: elements 22, 24, 26 of Fig. 1c, col 11/lines 10-19); and
- a hub system connected to said plurality of systems (Taylor: element 100 of Fig. 1c, centralized point see col 6/lines 55-61 and col 7/lines 34-37, including a message broker facility system col 10/lines 30-62, message broker defined as a software hub see col 3/lines 61-63), said hub system comprising:

- conversion means for converting a message received from a first information system to a form suitable for a second information system, said second information system being destination of said message (Taylor: element 716 of Fig. 7b, transform as necessary to suit or for target application see col 18/lines 63-col 19/line 3, transforming as need by the other system see col 15/lines 57-60, converting based on the kind of conversion need for target system see col 19/lines 15-28); and

- decision means for determining necessity of message conversion and a kind of conversion (Taylor: transformer definitions 716 that when implemented determine or define the output messages needed by one or more applications and define the process that transforms those messages as necessary see col 18/lines 56-col 19/line 3, definitions that when implemented determine when to transform data based on an input and output data mapping or correlation see col 19/lines 4-14, expression that when implemented determines the kind of conversion to be applied as needed by the target application see col 19/lines 15-25).

Regarding claim 2, this claim comprises the hub system having the same limitations discussed on claim 1, same rationale of rejection is application.

Regarding claim 3, Taylor further teaches a flow control means for determining a flow and destination of a message received from said first information system based on a class of said message (Taylor: server 170 having messaging engine 180 of Fig. 2, which routes and manages (i.e. "flow") event data, see col 12/lines 21-27, wherein routing service (580 not labeled on Fig. 5) directs messages based on their

content see col 15/lines 10-14, processes messages based on their message definition (713) which identifies the kind ("class") of message, its schema and which objects are to handle it (i.e. determining a flow and destination) see col 16/lines 37-40, using the message definition of the message received to propagate the message to a target object or application ("destination") see col 18/lines 20-30);

wherein said decision means further determines whether said flow control means should be used, an applying or not based on said determination (Taylor: based on the message received data type messages message are not routed through specific processes ("flows") e.g. determining that the message does not need any intermediate processing see col 16/lines 50-62).

Regarding claim 4, wherein said conversion means comprises protocol conversion means for conducting protocol conversion (Taylor: content transformation or non-format conversion, (i.e. "protocol") see col 16/lines 25-32 non-format, e.g. semantic conversion see col 5/lines 6-11, transformer (716 of Fig. 7b) for transforming, i.e. converting see col 18/lines 63-col 19/line 3 and col 15/lines 57-60); and

message conversion means for conducting message form conversion (Taylor: transformers 738 using transformation definition including format conversion see col 16/lines 25-32, data structure conversion, i.e. form conversion, see col 7/line 47-59), and

wherein said decision means checks protocols used in the first information system and the second information system, and if the protocols are the same, said decision means judges protocol conversion to be unnecessary (Taylor: transformer (716 of Fig. 7b) performs data conversion if the application to which the data is to be deliver requires transformation see col 18/lines 56-col 19/line 3, definitions that when implemented determine ("judge") when to transform data based on an input and output data mapping or correlation see col 19/lines 4-14, mediate differences in protocol and data structure see col 13/lines 6-17).

Regarding claim 5, said protocol conversion means conducts conversion from a protocol used in said first information system to an internal protocol in said hub (Taylor: conversion to an intermediate form use by the application within the system see col 4/lines 66-col 5/line 5), and

conducts conversion from said internal protocol to a protocol used in said second information system (Taylor: conversion to a standard canonical form intermediate form between sending and receiving application system before conversion required by the receiving application system see col 4/line 66-col 5/line 11).

Regarding claim 6, wherein said decision means determines processing to be conducted on the received message in accordance with decision rule (Taylor: process messages based on business system

requirements defined by a set of rules see col 4/lines 50-53, set of rules implemented by server 170 evaluate, modify and route all messages see col 12/lines 21-18, each adapter i.e. processing object processes (i.e. receives, produces and propagates) data according to a set of rules or definitions associated with the message see col 17/lines 55-58).

Regarding claim 7, wherein said decision rule associates a business class included in the received message with a message processing content (Taylor: message definition i.e. rules associated with the kind of message ("business class")) processing entities are to received, the message structure, schema, how to process the content and what output should be produced see col 16/lines 33-49).

Regarding claim 8, wherein said decision rule associates an amount of money included in the received message with a message processing content (Taylor: col 20/lines 66-col 21/line 5, 11-20 e.g. status paid rules, i.e. a message associated with an amount of money).

Regarding claim 9, wherein said decision rule associates user information included in the received message with a message processing content (Taylor: filter definition, i.e. rules associated with customer ("user") information contained in the message to which filtering procedures are to be applied see col 15/lines 61-67, and transformation expression, i.e. rules associated with customer information contained in the message, a message items containing the customer's last and first name field, each message item processed to produce a full name see col 19/lines 15-25).

Regarding claim 10, wherein said decision rule associates a message originating system with a message processing content (Taylor: transformer definition, i.e. rules associated with the message source system with how the content is to be processed see col 19/lines 46-51, message definition, i.e. rules associated with each source entity defining what kind of message to be produced, i.e. process see col 16/lines 41-49).

Regarding claim 11, this claim comprises the method for making a plurality of information systems cooperate, said method comprising the steps substantially the same as those disclosed on claims 1-2, same rationale of rejection is applicable. Taylor, further teaches transmitting said message from said hub system to a second information system (Taylor: produce/sends output system messages to target entities which propagate the system messages to its target enterprise application systems see col 16/lines 11-15, 30-32, and col 18/lines 24-32).

Regarding claim 12, this claim comprises limitations that are substantially the same as those discussed on claim 3, same rationale of rejection is applicable.

Regarding claim 13, this claim comprises the hub program executed by a computer to make a plurality of information systems cooperate, said hub program executing steps that are substantially the same as those discussed on system claim 1 and method claim 11, same rationale of rejection is applicable.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor (acting), David A. Wiley can be reached on (703) 308-5221. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.


Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry;
Or Telephone:
(703) 306-5631 for TC 2100 Customer Service Office.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".


B. Prieto
TC 2100
Patent Examiner